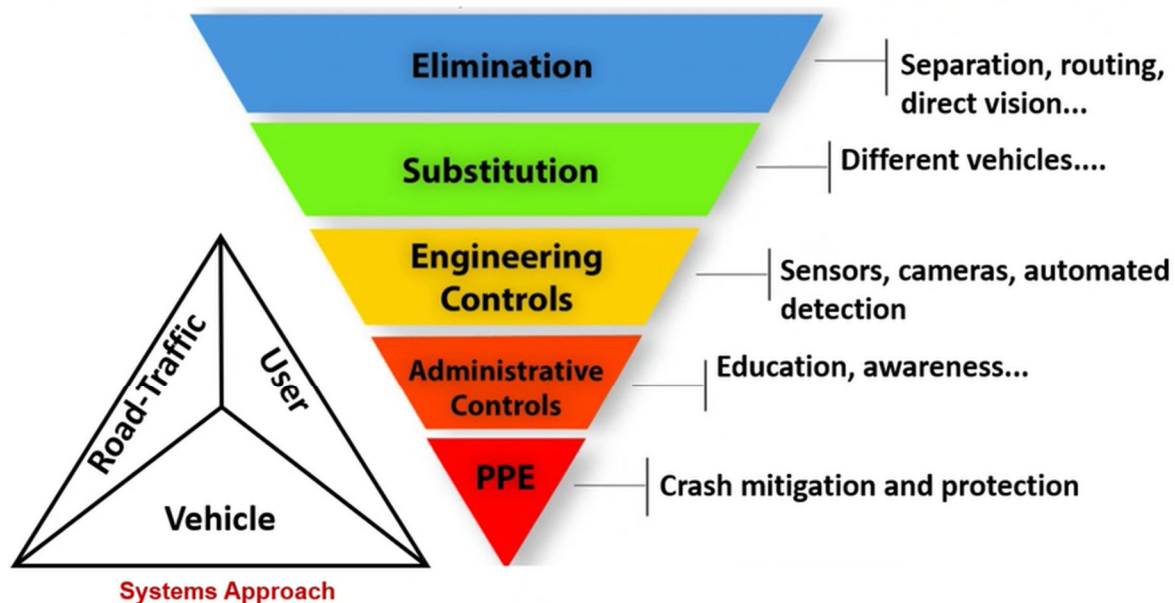

Hierarchy of Controls Example from Transport Canada

The most effective solutions are eliminating the hazards, for example by separating vulnerable road users and commercial vehicles. When elimination is not possible, substitution is the next most effective solution, for example by using different types of commercial vehicles such as a direct vision cab-over truck design. A third option is engineering controls, such as detection technologies and automated emergency braking systems. These solutions are long-term systemic solutions. The least effective controls are those applied after a collision occurs. An example is side-guards. Transport Canada research indicates these types of systems are not effective in moving a vulnerable road user (VRU) out of the rear wheel path, as they tend to knock over the person.

Hierarchy of Controls Example: Limiting VRU truck collisions



Source: Presentation by Peter Burns, Human Factors and Crash Avoidance Research, Transport Canada